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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,139	04/16/2004	Henry Buijs	15246-6US SC/sm	7990

20988 7590 03/27/2007  
OGILVY RENAULT LLP  
1981 MCGILL COLLEGE AVENUE  
SUITE 1600  
MONTREAL, QC H3A2Y3  
CANADA

EXAMINER
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ROSENBERGER, RICHARD A

ART UNIT	PAPER NUMBER
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2877

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/27/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/825,139	BUIJS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Richard A. Rosenberger	2877	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07/18/2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14,16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14,16 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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1. This action is in response to the granting of the petition filed 20 September 2006 to withdraw the holding of abandonment

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 10, 12, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris et al (US 4,647,210) in view of Haworth et al (US 6,144,444) and Enejder (US 6,510,330).

As for claims 1 and 12, Morris shows a device that allows optical analysis of a confined process stream comprising an input fiber (22), an output fiber (42), and at least one optical element (30) for directing the light across a conduit section into the output fiber.

Morris does not hold the optical device in place on the process stream conduit by means of a "clip" as claimed. It is known in that art that optical instruments for measurements of a liquid in a conduit can be held in place by means of such a clip; see the clips of Enejder and Haworth et al. The clip of Enejder includes means (6) to measure light that passes through the liquid in the conduit, showing that it is known in the art to use such a clip for transmission measurements, and the clip of Haworth et al

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shows it is known in the art to use such a clip to hold optical fibers to direct the light to and from the conduit. It would have been obvious to use such a clip to hold the optical fibers of the test of Morris et al because, as discussed by Morris et al (column 1, line 58 through column 2, line 2), there are art-recognized advantages to using the optical fibers to direct the light to and from the conduit, and use of such a clip allows easy and convenient placement of the measuring instrument without having to place apertures in the conduit which can lead to leakage and which cannot be readily added and need to be filled or covered should the test instrument need to be moved or removed.

As in claim 2, the clamp of the Haworth et al reference is releasably secured; the reference refers to removing the clamp for the conduit (column 5, lines 20-21), as is the clamp of Enejder (column 4, line 4).

As in claim 3, the device of Haworth et al is adjustable to be securable on conduits of different cross-sectional dimensions (column 6, lines 48-50).

As in claim 4, the slot for receiving the conduit receives interchangeable conduit adapters (42, see figures 2B and 2C) to grip conduits of different external diameters.

As for claim 5, Enejder shows an arrangement for connecting an optical measuring device to a transparent conduit (3) of measuring a liquid flowing therethrough, and shows as a part of that arrangement a removable cover (2). It would have been obvious to use this type of known arrangement with a removable cover for attaching the optical measuring because, as shown by Enejder, it is a known arrangement for accomplishing the desired end of attaching an optical measuring arrangement to a transparent conduit for measuring the fluid flowing therethrough.

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As relating to claim 10, Morris shows the transmitting and receiving optical fibers located on the opposite side of the conduit and the transmitted light measured; see also Enejder, with light source 4, and transmitted light detector 6 on opposite sides of the conduit.

As for claim 14, clearly the fibers must be connected to the clip by some connector means.

As in claim 16, it would have been obvious to use a wavelength of light appropriate to the test at hand; it is noted that Haworth et al teaches the use of light including infrared light (column 8, line 7), and, it is at least obvious to use fibers that will transmit the light being used for the test.

4. Claims 6-9, 11 13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris et al (US 4,647,210) in view of Haworth et al (US 6,144,444) and Enejder (US 6,510,330) as applied above, and further in view of Soodak et al (US 4,227,814) and Penhasi et al (US 3,527,542).

As set forth above, it is known to place an optical measuring device onto a transparent conduit to measure the fluid flowing therethrough. Those in the art know that the details of the means to so locate the optical arrangement on the conduit can vary; there is not, and there is known not to be, and no one in the art would assume there must be, a single manner of doing this.

As in claims 6, 11, 13, 17, one known manner of doing this is to provide a slot between walls of a light transmitting material; see Soodak et al, which shows sliding the

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conduit into a slot with the light being passed through the conduit through the walls holding the conduit, and Penhasi et al which shows that it is known that the walls can be made of light transparent material where they engage the conduit (claim 17), forming gripping arms to hold the conduit in place (claims 11 and 13). It would have been obvious to construct the walls of Soodak et al of light transmissive material as shown by Penhasi et al because this is a known manner of constructing such a conduit holding slot and it would better ensure a smooth optical contact minimizing distortion due to unevenness and unwanted and possibly irregularly curved surfaces in the optical path.

As in claims 7, 8, and 9, both Morris and Haworth teach that optical fibers can be used to carry the light to and from the conduit. The system thus has connectors for connecting the fibers to the rest of the instrument, both at the clip end and the source and detector ends of the fibers. Morris et al teaches the use of a lens (30) as in claim 7.

5. The remarks filed 18 July 2005 have been considered. Note the citation of the reference to Morris et al, which teaches the use of optical fibers in a transmission test of liquid in a conduit, and the use of a lens (30) to guide the light from the input to the output.

6. Périères (US 3,899,688) shows the use of fibers to direct light to and from a conduit for an optical test of a fluid in the conduit. Lyshkow (US 3,864,044) also shows this use of optical fibers (see figure 5) as an alternative to the direct placement of the

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light source and sensor (see figure 1) next to the conduit, with the accompanying benefits such fibers provide (column 5, lines 25-28).

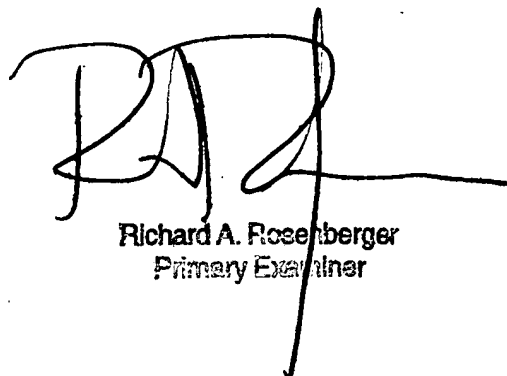
7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard A Rosenberger whose telephone number is (571) 272-2428. The examiner can normally be reached on Monday through Friday during the hours of 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

R. A. Rosenberger  
16 March 2007



Richard A. Rosenberger  
Primary Examiner